

WHAT IS CLAIMED IS:

- Sub 5
1. An opto-electronic package comprising the combination of:
an enclosed package;
a plurality of electrical contacts extending into the enclosed package;
an optical integrated circuit mounted within the package and coupled
to the electrical contacts; and
an optical fiber extending through at least one peripheral portion of
the package to the optical integrated circuit along a common plane;
wherein the package is comprised of opposite portions joined together
at an interface substantially at the common plane.
2. An opto-electronic package according to claim 1, further including a second
optical fiber extending through a second peripheral portion of the package along the
common plane.
3. An opto-electronic package according to claim 1, wherein the optical fiber
comprises a plurality of optical fibers.
4. An opto-electronic package according to claim 1, wherein the optical fiber
comprises plural optical fibers extending through opposite ends of the package to
the optical integrated circuit along the common plane.
5. An opto-electronic package according to claim 4, wherein the plural optical
fibers comprise opposite arrays of optical fibers lying within the common plane.
6. An opto-electronic package according to claim 4, where the opposite portions
of the package comprise a package body and a package lid joined at said interface
and configured to form end pipes around the optical fibers at opposite ends of the
package.
7. An opto-electronic package according to claim 6, wherein the package body
and the package lid are solder sealed to each other along said interface and the

optical fibers are solder sealed with the end pipes at the opposite ends of the package

8. An opto-electronic package according to claim 6, wherein the package body has plural grooves therein at opposite ends thereof forming portions of the end pipes.

9. An opto-electronic package comprising the combination of:

a package body having electrical leads extending through at least one side thereof to wire bond pads within the body, and a fiber feedthrough path extending through the package body from opposite ends thereof;

an optical integrated circuit mounted in the package body in the fiber feedthrough paths;

a pair of fiber arrays extending into the package body from the opposite ends thereof along the fiber feedthrough path to opposite sides of the optical integrated circuit; and

a package lid mounted on and enclosing the package body and having opposite feedthrough portions disposed at the fiber feedthrough path.

10. An opto-electronic package according to claim 9, wherein the fiber feedthrough path lies within a common plane within an interface between the package lid and the package body.

11. An opto-electronic package according to claim 10, wherein the package lid is solder sealed to the package body around the interface therebetween.

12. An opto-electronic package according to claim 9, wherein the package body and the package lid each have hollowed-out fiber feedthrough portions at opposite ends thereof disposed on opposite sides of the fiber arrays and forming end pipes.

13. An opto-electronic package according to claim 12, wherein the pair of fiber arrays are solder sealed within the end pipes.

14. An opto-electronic package according to claim 12, wherein the hollowed-out fiber feedthrough portions of the package body each have a plurality of grooves therein for receiving individual fibers of the pair of fiber arrays.

15. A method of making an opto-electronic package comprising the steps of:

5 providing a package body having fiber feedthrough paths on opposite sides of an optical integrated circuit;

laying optical fibers in the fiber feedthrough paths on the opposite sides of the optical integrated circuit, aligning the optical fibers and attaching the optical fibers to the optical integrated circuit;

10 providing a package lid having fiber feedthrough paths at opposite ends thereof;

mounting the package lid on the package body so that the fiber feedthrough paths thereof are disposed on opposite sides of the optical fibers from the fiber feedthrough paths of the package body;

15 sealing the package lid to the package body; and

sealing the optical fibers with the fiber feedthrough paths of the package body and the package lid.

16. A method of making a opto-electronic package according to claim 15, comprising the further step of anchoring the optical fibers at the fiber feedthrough paths of the package body and the package lid.

17. A method of making an opto-electronic package according to claim 15, wherein the steps of sealing the package lid and sealing the optical fibers are performed as a single step.